Ingrid:

As a ground rule, I think we all agree that City Light should have a high assurance of having sufficient revenues to cover costs. The issue is how that is accomplished, in particular in an organization the rate payers ultimately bear the risk one way or another.

There are three principal ways that financial assurance can be accomplished without resorting to borrowing: through the holding of cash on hand, through setting rates higher than costs and through timely rate increases to offset cost pressures. Each course has its advantages and drawbacks, which will be discussed below. [The cash on hand is the amount over and above working-capital needs, and which is a separate issue that the RAC needs to address.]

Before going further, I think it is useful to consider the major net-revenue risk that Seattle City Light faces. SCL is heavily dependent on hydroelectric power. In that sense the utility resembles several other Northwest utilities, including the Bonneville Power Administration. Much of what I will discuss here relates to nearly 15 years of work and analysis of BPA's finances done by BPA's customers and agency staff, some of which was done during the time that Randy Hardy was Administrator of the agency.

The result of financial policies at BPA similar to what seems to be proposed here has been, in my view, a financial disaster for the region—costs out of control and excessively high electric rates. That is, BPA has mishandled its finances and cost levels in the years since they were established (and after the departure of Randy Hardy), and the issues involved there are the same as being brought forward (or not) here. The question of whether the problems are due to the financial structure established by BPA (similar to what is being proposed here) is a worthy topic for the RAC.

The net revenues that any utility can expect will vary from year to year depending on weather, fuel prices, market prices of energy and, in the Northwest, the amount of hydroelectric power. Hydro power affects the utilities in two ways: First, the actual amount of energy available to serve load (at virtually zero incremental cost) varies considerably from year to year. To the extent that market purchases must be made to supplement the hydro, costs will increase for the utility. Second, for reasons of planning philosophy, hydro-based utilities generally will have surplus energy to sell over and above what they plan to use to serve load, and the revenues from these surplus or secondary sales will affect the net-revenues of the utilities. These net-revenue fluctuations stem from the fact that most hydro utilities set rates that count on a projected average level of revenues from hydro energy. That is, rates are set based on total costs less the projection of expected secondary power revenues.

All utilities, not just hydro utilities, are subject to fluctuations in their revenues and costs due to weather and to the costs of fuel. Hydro-based utilities have another major influence on their financial performance: changes in the amount of rainfall and

snowpack that occur naturally. For Northwest utilities, there is a significant difference in the amount of hydro available in a dry year versus a wet one. These differences from season to season and year to year affect the revenues of the utility directly and even though hydroelectric generation has the benefit of not being subject to fuel-cost variations—directly—the unavailability of power affects secondary revenues.

The objective of the financial policy here (and at BPA) is to find a means to deal with the financial effects of the combined variations in weather, hydro and market prices. As I understand it from the information provided to the RAC, City Light has modeled the impacts of variations in the key factors that affect their net revenues. The net results have been rank-ordered, and a recommendation has been made to increase revenues above base costs so that 95 percent of the net revenue outcomes will be covered in any year.

Based on my experience with BPA, which I think is largely applicable to Seattle, the financial results will show that under the large majority of conditions the utility faces little expected financial strain. However, there are series of years—such as, the four-year critical period—in which hydro conditions are poor region-wide (and probably in City Light's hydro basins). During those sequences of years, the financial strain becomes very large.

The problem is that these circumstances are serious—but rare. Measures to provide financial security for events that might occur once in 50 years may not make sense for the remaining years.

As indicated earlier, there are three financial policies to cover the distribution of outcomes of net revenues: accumulate cash to have it available for poor financial years, set rates above costs to provide additional funds to meet financial shortfalls, and/or plan to increase rates during financial emergencies. Any one of these three policies can produce financial insurance for the utilities, as well as can a combination of the three. A recommendation on the balancing of these three is the task, I believe, of the RAC. As indicated earlier, there are advantages and drawbacks to each method.

The accumulation of cash has the advantage that when a financial crisis occurs, there are funds to cover shortfalls. Its serious disadvantage is that a large source of cash--pejoratively, a slush fund—is available to spend on non-emergencies. The problem is compounded by the potentially decades-long periods between severe hydro conditions, so cash lies around for long periods of time—as a temptation. That is, in the periodic clash between cost cutting at the utility and dipping into the fund, I suspect that dipping into the fund would win. At least that is the experience with BPA. The result is that the fund always has to be replenished to replace what has been used to finance ongoing operations, with the result, if BPA is the example, of not having a fund available in a true emergency.

The size of the reserve fund also is a problem. At BPA a fund of about $1.5 billion would be needed to cover its estimate of revenue variation without other

measures. That figure needs to be compared to a revenue requirement of about $3.0 billion. Maintaining that size of reserve fund for events that may not occur but once every 50 years is, in my opinion, too much of an attractive nuisance for City Light and city officials. I have not reviewed the analysis done in Seattle, nor the size of the fund necessary for SCL relative to the revenue requirement, but I think it is something that the RAC should look into closely.

The second method to provide financial insurance is to establish rates that are above cost. The advantage of this method is that the cushion provided in the higher-than-cost rates is a source of cash for financial shortfalls and, if not used in a particular year, can accumulate into a reserve fund. [Using the funds for capital investment does not provide financial insurance, as is discussed in the Equity Misrepresentation section below.]

There are three principal disadvantages to the second method. First, the increased revenues encourage increased spending, just as a cache of cash does. Second, the amount placed in rates as a cushion each year is normally insufficient to address the full problem. Third, the increased rates that come as a result of this method are harmful to rate payers if the proceeds are not used responsibly.

The third option for providing financial insurance is to raise rates when the utility experiences a financial emergency. From a political point of view, this option forces City Light and the City Council to have a vote to raise rates, which to the Department and City Council is probably not palatable.

From the rate payer point of view, however, the specter of being forced to raise rates puts maximum pressure on the utility to cut costs and minimize (or even eliminate) the need for a rate increase. If one takes the view, as I do, that utilities tend to be well-larded, the exercise of cutting costs from time to time is healthy for rate payers. The second advantage is that raising rates will provide appropriate price and behavior signals to rate payers, because the times that the utility is experiencing financial pressures is usually a time when power-market prices are high and the City Light has little power to sell. [These conditions are related, of course.] Had California consumers faced the high prices of 2000 and 2001, the crisis would have been less severe, perhaps much less so.

The disadvantage of reliance on rates (to rate payers) is some uncertainty in what the rate level might be. However, there is likely to be significant warning of potential rate increases, so there would be time for rate payers to adjust.

The Equity Misrepresentation

Suggestions have been made that an increase in equity of the utility would allow it to weather financial swings. For example, the First Annual Report of the Seattle City Light Advisory Board states that “City Light should reduce its long-term debt substantially over the next 5-7 years in order to enhance the utility’s ability to withstand

future 2001-type crises and potential structural challenges." (page 6) BPA made similar representations in its financial policies.

The problem with this statement is that it confuses the notion of stockholder equity with lack of debt. With stockholder equity, a utility can conserve cash simply by lowering or eliminating the dividend. The cash can be used to offset any financial downturns. When additional collections in rates are used to reduce debt, there is no source of cash to be used for financial problems once the debt is paid off. That is, the cash paid to reduce debt is no longer a usable reserve for annual financial shortfalls. City Light can borrow against its assets, but doing so is little different from borrowing during poor financial times in the first place. There may be more "equity in the system" to borrow against, but the real market value of the assets—sometimes built decades earlier—and their book value, may be so far apart has to have little meaning.

This is not to dismiss debt management as a legitimate financial concern of the utility. Rather, it is to say that the equity inherent in paying off debt cannot be considered a tool for handling financial variations. [Regarding the debt level, I have an overriding belief that my clients are far better off with City Light borrowing at 2% than them having to borrow at three or four times that level or comparing that municipal borrowing rates with hurdle rates for investment that are even higher than the corporate borrowing rates.]

Bottom Line

There is an important balance that needs to be struck among City Light carrying high levels of cash reserves, raising rates above costs to fund either the accumulation of cash or paying down debt and relying on rate increases during times of severe stress. I think the RAC can provide rate payer insight into the issue, both for the benefit of the Advisory Board and City Council.